

Predation of *Dermatonotus muelleri* (Boettger 1885) by *Lepidobatrachus llanensis* Reig and Cei 1963

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Dermatonotus muelleri (Boettger 1885) is a widely distributed microhylid, which occurs throughout the central and southern Chaco in South-America (Colli et al., 2004). In addition to being nocturnal, *D. muelleri* is characterized by fossoriality, aestivating in subterranean chambers for considerable periods (Nomura, Rossa-Feres and Langeani, 2009; Nomura and Rossa-Feres, 2011). The species is an explosive breeder, which reproduces in temporary ponds during the wet season ranging from October to February (Nomura and Rossa-Feres, 2011).

On 7 December 2013, we performed an intensive night survey between the localities Fuerte Esperanza and Misión Nueva Pompeya, in the Chaco Province, northern Argentina. The night was preceded by a heavy storm, creating a multitude of temporary ponds. The environmental conditions triggered the explosive reproduction in *D. muelleri*: vocalizing adult males were heard in addition to observations of pairs in amplexus inside water bodies and the presence of females on land which were headed to the breeding ponds. At 00.48 hours, we witnessed an adult *D. muelleri* being preyed upon by an adult *Lepidobatrachus llanensis* Reig and Cei 1963 on the side of a dirt-road segment (Ruta Provincial no. 61) (25°0'8.52"S, 61°30'50.25"W). The frog was captured inside the water, head first (Figure 1). Morphological measurements taken during the same night of both species showed that the snout-vent length, head width and body mass ranged between 64.6-81.9 mm, 13.4-17.3 mm and 25.9-62.7 g. in *D. muelleri* (18

females, 25 males), and 69.6-83.2 mm, 35.3-43.9 mm and 44.7-65.5 g. in *L. llanensis* (1 female, 1 male).

A recent review (Schalk et al., 2014) showed that most Ceratophryidae members are generalist and opportunistic foragers, and predation on *D. muelleri* was previously reported only by *Ceratophrys cranwelli* and *Lepidobatrachus laevis* Budgett 1899. Hulse (1978) reported in his study that the diet of *L. llanensis* included mostly amphibians (adults and tadpoles) and aquatic invertebrates, the species being apparently more an aquatic rather than a terrestrial predator. Our observation is in accordance with the previous studies regarding the diet and feeding behaviour of Ceratophryidae members.

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Figure 1. An adult *Lepidobatrachus llanensis* preying on an adult *Dermatonotus muelleri* inside a temporary pond from dry Chaco, Argentina.